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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/816,170

03/26/2001

Eiichi Hosomi

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12/04/2002

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WASHINGTON, DC 20006

EXAMINER

ERDEM, FAZLI

ART UNIT

PAPER NUMBER

2826

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|--------------------------------|--|
| Office Action Summary | Application No. 09/816,170 | Applicant(s) HOSOMI, EIICHI | |
| | Examiner Fazli Erdem | Art Unit 2826 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-23,25 and 26 is/are rejected.
- 7) ☒ Claim(s) 4 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Response to Arguments

1. Applicant's arguments filed 9/23/2002 have been fully considered but they are not persuasive.

Allowable Subject Matter

2. Claims 4 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1, 5, 7, 9, 10, 11, 12, 13, 14, 15, 17, 19, 20, 21, 25 and 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Masayuki et al. (6,262,488).

Regarding Claim 1, in Fig. 1 and Fig. 18, Masayuki et al. show a semiconductor device with memory units labeled as 4A in Fig. 1 and RAM in Fig. 18, selecting terminals WE, OE, A, DS, CS and I in Fig. 18, and a decoder that functions as identifier labeled decoder in Fig. 18 and 3 in Fig. 1.

Regarding Claim 5, Vcc and Vss is connected to the decoder in Fig. 18.

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Regarding Claim 7, the RAMs are SRAMs.

Regarding Claim 9, CS terminals receive their signal out of decoder which gets its address select signal from the A terminals

Regarding Claim 10, in Fig. 1 and Fig. 18 there are multiple of memories.

Regarding Claim 11, decoders in Fig. 18 and 3 in Fig. 1 are separate chips.

Regarding Claim 12, decoders in Fig. 19 and 3 in Fig. 1 have separate packages.

Regarding Claim 13, decoder 3 and memories 4A in Fig. 1 are placed on the same board and packaged.

Regarding Claim 14, in Fig. 18, address signals are connected to the decoder.

Regarding Claim 15, in Fig. 18, there are two decoders and multiple of select signals.

Regarding Claim 17, in Fig. 18 vcc and vss are connected to the device.

Regarding Claim 19, in Fig. 2, memories 4A and 4B and 5C and 5D are stacked.

Regarding Claim 20, stacked memories 4A and 4B are next to each other.

Regarding Claim 21, in Fig. 1, 2 and 18, there are multiple of memories and decoders.

Regarding Claim 25, in Fig. 1, 2, and 18, decoder and select signals are connected with a wire.

Regarding Claim 26, in Fig. 18, the semiconductor device is supplied with power Vcc and Vss.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2, 3, 6, 8, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masayuki et al. (6,262,488) in view of Kasa et al. (5,179,536).

Masayuki et al. show all the claimed subject matter in 2, 3, 6, 8, 16 and 18, except they fail to describe an adder circuit adder and comparator and they also fail to include a ROM, EPROM, or EEPROM. However, in Fig. 39 of Kasa et al, item 532 is an adder and item 522 is a comparator. Masayuki et al. further specifies the invention to be a ROM in the background section. Furthermore in description of Fig. 8, they provide bit structure of semiconductor memory device.

It would have been obvious to one of having ordinary skill in the art to include an adder circuitry, a comparator in decoder and associated circuitry in an programmable memory Masayuki et al. as taught by Kasa et al. because such structure would provide a better flexibility.

5. Claim 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masayuki et al. (6,262, 488) in view of Chen (5,761,609).

Masayuki et al. describe all the claimed subject matter except a fuse and a resistance element. However in Fig. 3, Chen shows a limited use circuit where a fuse structure 24 and a resistor 26 is included.

It would have been obvious to one of having ordinary skill in the art to include a fuse and resistor structure to the semiconductor memory module of Masayuki et al. as taught by Chen because such structure would provide a better programmability.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fazli Erdem whose telephone number is (703) 305-3868. The examiner can normally be reached on M - F 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (703) 308-6601. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

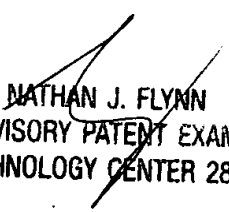
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November 26, 2002


NATHAN J. FLYNN
SUPERVISORY PATENT EXAMINER
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